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EXAMINER				
WIENER, ERIC A				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

# Office Action Summary

**Application No.**

10/719,673

**Applicant(s)**

KHAKZADI ET AL.

**Examiner**

Eric Wiener

**Art Unit**

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 March 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 5-16 and 19-28 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1, 5-16, and 19-28 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/S5108)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This action is responsive to the following communications: Amendment filed on 3/27/2008.

**This action is made final.**

2. Claims 1, 5 – 16, and 19 – 28 are pending. Claims 25 – 28 are new. Claims 1, 8, 19, and 24 are the independent claims. Claims 1, 8, 19, and 24 are the amended claims. Claims 2 – 4, 17, and 18 have been cancelled. Claims 1, 5 – 16, and 19 – 28 have been rejected by the Examiner.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 5 – 6, 14 – 16, and 21 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nahaboo et al. (US 5,974,253) and Dangelo et al. (US 5,493,508).

**As per independent claim 1**, Nahaboo discloses *a command processor stored on a computer readable memory for use with a computer system (column 6, lines 16 – 18) comprising a graphical user interface program for providing a graphical interface to the computer system (Fig. 2) and a command interpreter (column 6, line 50), which:*

- *loads one or more configuration commands into the command processor from at least one of:*
  - o *a user specified command configuration script comprising the one or more configuration commands (column 6, lines 50 – 59 and column 13, lines 32 – 35), wherein command configuration scripts are part of interface description files, which are user specified because a user may specify an interface description file to load, or from*
  - o *a command line interface in which the one or more configuration commands are entered by a user (column 9, lines 53 – 60, column 10, lines 36 – 44, and Fig. 4B), wherein the command line area to enter configuration commands is area 315 of Fig. 4B, and*
- *interprets the configuration commands and modifies the graphical user interface at run time of the graphical user interface according to the interpreted configuration commands (column 6, lines 50 – 64), wherein the fact that the interpreter interprets all events that arise and that the system reacts in a purely dynamic manner means that the interpreter will interpret both saved user*

specified configuration scripts and configuration commands entered by a user from a command line in order to dynamically modify the interface, *including:*

- *building graphical objects within the graphical interface according to the interpreted configuration commands* (column 7, line 55 – column 8, line 10),
- *assigning functionality to the built graphical objects according to the interpreted configuration commands* (column 9, lines 39 – 42), and
- *displaying the graphical objects within the graphical interface according to the interpreted configuration commands* (column 10, line 45 - column 11, line 2, column 15, lines 20 – 21, and Fig. 5), wherein the disclosed example is not intended to limit the invention in any way, and is only an example of one of many different types of GUI's that may be created from objects built through configuration commands as made possible through Nahaboo's disclosed invention for developing a user interface.

However, Nahaboo does not explicitly disclose that the graphical objects are selectable by a user to access the assigned functionality to produce an integrated circuit design.

Nevertheless, in an analogous art, Dangelo discloses *graphical objects selectable by a user to access assigned functionality to produce an integrated circuit design* (column 9, lines 3 – 12), wherein each “component” corresponds to a graphical object with assigned functionality, that is used to produce an integrated circuit design.

As disclosed by Nahaboo's invention is for an extremely flexible interface development tool that can be used *regardless* of the application (column 1, lines 29 – 31). Therefore, because the nature of utilizing a graphical user interface in a circuit design process would allow for the

specification and modification of the graphical user interface to produce a design (Dangelo, column 2, lines 62 – 65) and because the design tools of Dangelo's interface may be specified for particular users (Dangelo, column 16, lines 16 – 42), Dangelo would thus look to Nahaboo regarding features of modifying a graphical user interface to produce a design. Furthermore, Nahaboo would look to Dangelo regarding adapting a modifiable graphical user interface to such applications as integrated circuit design, because an integrated circuit design application is one of many possible uses for Dangelo's invention. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teachings of Dangelo into the invention of Nahaboo.

**As per independent claim 8**, Nahaboo discloses *a method of providing a fully customizable graphical user interface* (column 6, lines 11 – 23) *comprising:*

- *upon execution of a command processor, loading a top level Tool Command Language (TCL) command into a namespace* (column 3, lines 52 – 54 and column 6, lines 50 – 56), *the command processor including a graphical user interface (GUI) without graphical objects* (Fig. 4B);
- *loading one or more TCL commands into the command processor from at least one of:*
  - o *a user specified TCL command configuration script comprising the one or more TCL configuration commands* (column 6, lines 50 – 59 and column 13, lines 32 – 35), wherein command configuration scripts are part of interface description files, which are user specified because a user may specify an interface description file to load, *or from*

- *a command line in which the one or more TCL configuration commands are entered by the user (column 9, lines 53 – 60, column 10, lines 36 – 44, and Fig. 4B), wherein the command line area to enter configuration commands is area 315 of Fig. 4B, and*
- *building graphical objects (column 7, line 55 – column 8, line 10) according to the TCL configuration commands (column 6, lines 53 – 56)*
- *assigning functionality to the built graphical objects (column 9, lines 39 – 42) according to the TCL configuration commands (column 6, lines 53 – 56)*
- *displaying the graphical objects within the GUI according to the TCL configuration commands (column 3, lines 34 – 36), wherein the disclosed example is not intended to limit the invention in any way, and is only an example of one of many different types of GUI's that may be created from objects built through configuration commands as made possible through Nahaboo's disclosed invention for developing a user interface.*

The examiner has interpreted the fact that Nahaboo discloses using an interpreted language (Abstract, lines 1 – 2) sufficiently discloses the use of the interpreted language Tool Command Language.

However, Nahaboo does not explicitly disclose that the graphical objects are selectable by a user to produce an integrated circuit design.

Nevertheless, in an analogous art, Dangelo discloses *graphical objects selectable by a user to produce an integrated circuit design* (column 9, lines 3 – 12), wherein each “component”

corresponds to a graphical object with assigned functionality that is used to produce an integrated circuit design.

It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teachings of Dangelo into the invention of Nahaboo for the same reasons as disclosed in the rejection of claim 1, *supra*.

**As per independent claim 19**, Nahaboo discloses *a method of providing a graphical user interface, comprising:*

- *loading a top level Tool Command Language (TCL) command into a namespace upon execution of a command processor* (column 3, lines 52 – 54 and column 6, lines 50 – 56)
- *providing a command interpreter for interpreting one or more configuration commands from a user* (column 6, lines 50 – 52)
- *loading a configuration command of the one or more configuration commands into the command processor from at least one of:*
  - o *a user specified command configuration script comprising the configuration command* (column 6, lines 50 – 59 and column 13, lines 32 – 35), wherein command configuration scripts are part of interface description files, which are user specified because a user may specify an interface description file to load, or from
  - o *a command line in which the configuration command is entered by the user* (column 9, lines 53 – 60, column 10, lines 36 – 44, and Fig. 4B), wherein the



command line area to enter configuration commands is area 315 of Fig. 4B,  
*and*

- *assembling a graphical user interface having no hard coded objects and including at least one graphical user interface (GUI) component based on interpreted configuration commands from the user* (column 6, lines 53 – 59)
- *wherein all objects within the graphical user interface are user defined through the one or more configuration commands* (column 6, lines 53 – 59), and wherein the fact that the user can enter the ‘editing’ mode without entering the ‘execution’ mode means that said user can define all objects of the graphical user interface before execution, thus defining all objects of a graphical user interface having no hard coded objects.

The examiner has interpreted the fact that Nahaboo discloses using an interpreted language (Abstract, lines 1 – 2) sufficiently discloses the use of the interpreted language Tool Command Language.

However, Nahaboo does not explicitly disclose that the at least one graphical user interface (GUI) component is selectable by a user to access an associated function to generate an integrated circuit design.

Nevertheless, in an analogous art, Dangelo discloses *at least one graphical user interface (GUI) component is selectable by a user to access an associated function to generate an integrated circuit design* (column 9, lines 3 – 12), wherein each “component” corresponds to a GUI component with assigned functionality that is used to produce an integrated circuit design.

It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teachings of Dangelo into the invention of Nahaboo for the same reasons as disclosed in the rejection of claim 1, *supra*.

**As per independent claim 24**, Dangelo discloses *an integrated circuit software design suite* (column 5, lines 21 – 26) *comprising*:

- *a command processor having a graphical user interface* (column 8, lines 47 – 67) *and a command interpreter* (column 5, lines 25 – 28) *for interpreting user commands* wherein the fact that the system processes user selections for graphically interfacing with elements sufficiently corresponds to having a processor for processing and interpreting commands
- *one or more design tools corresponding to processes within an integrated circuit design process* (column 8, lines 47 – 50)
- *wherein the one or more design tools operate under control of the command processor and within the graphical user interface* (column 3, lines 46 – 61 and column 8, lines 47 – 67), *further wherein the configuration commands build graphical objects for the graphical user interface and assign functionality to the built graphical objects* (column 3, lines 34 – 61; column 8, lines 47 – 67; and column 9, line 54 – column 10, line 10), wherein column 3, lines 46 – 61 discloses that the description supports a structural description of graphical components that corresponds to a behavioral description of program statements.

Dangelo does not explicitly disclose that the graphical user interface is specified entirely by a user via a user input including one or more configuration commands provided to the command processor at runtime.

However, in an analogous art, Nahaboo discloses *a graphical user interface specified entirely by a user via user input through one or more configuration commands loaded into the command processor at run time of the command processor and interpreted by the command interpreter* (column 6, lines 56 – 64), *wherein the configuration commands build graphical objects for the graphical user interface* (column 7, line 55 – column 8, line 10) *and assign functionality to the built graphical objects* (column 9, lines 39 – 42).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Dangelo with the teachings of Nahaboo for the same reasons as disclosed in the rejection of claim 1, *supra*. Furthermore, since the user is able to specify parts of the interface at runtime, it would be obvious that said user is also able to specify the entire interface at runtime.

**As per claim 5**, and taking into account the rejection of claim 1, Dangelo further discloses *a suite of integrated circuit tools, each design tool of the suite having a functionality corresponding to one or more steps in a design flow process of an integrated circuit* (column 1, lines 7 – 9, 38 – 41), wherein it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate this teaching of Dangelo into the invention of Nahaboo for the same rationale as disclosed in the rejection of claim 1, *supra*.

**As per claim 6**, and taking into account the rejection of claim 5, Nahaboo further discloses that *the command processor loads each design tool into the graphical user interface based on the user configuration commands* (column 6, lines 50 – 52).

**As per claim 7**, and taking into account the rejection of claim 1, Nahaboo further discloses *a graphics engine tool for drawing contents of a database into the graphical user interface based on the user configuration commands* (column 3, lines 52 – 61).

**As per claim 9**, and taking into account the rejection of claim 8, Nahaboo further discloses *performing functions based on user interactions with the graphical objects according to their assigned functionality* (column 10, lines 45 – 54).

**As per claim 10**, and taking into account the rejection of claim 8, Nahaboo further discloses that *the graphical objects are selected from a group consisting of windows, window panes* (column 4, lines 39 – 41), *buttons, and menus* (column 6, lines 4 – 5).

**As per claim 11**, and taking into account the rejection of claim 8, Nahaboo further discloses *creating the TCL command configuration script and assigning the TCL command configuration script to one of the graphical objects* (column 11, lines 55 – 58). Nahaboo does not explicitly disclose the TCL script corresponds to a circuit design function. However, Nahaboo does disclose that “the purpose of this invention is to define an extremely flexible interface development tool that can be used regardless of the application” (column 1, lines 29 – 31). Therefore, Nahaboo’s script could correspond to a circuit design function if the user defines it in such a way.

**As per claim 12**, and taking into account the rejection of claim 11, Nahaboo further discloses that *one of the graphical objects is a button* (column 6, line 4).

**As per claim 13**, and taking into account the rejection of claim 11, Nahaboo further discloses that *one of the graphical objects is an item within a pull-down menu* (column 6, line 5).

**As per claim 14**, and taking into account the rejection of claim 8, Dangelo further discloses *changing a look and feel of the graphical user interface during a circuit design process* (column 2, lines 62 – 65), wherein it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate this teaching of Dangelo into the invention of Nahaboo for the same rationale as disclosed in the rejection of claim 1, *supra*.

**As per claim 15**, and taking into account the rejection of claim 14, Nahaboo further discloses *creating new graphical objects, previously undefined by the command processor* (column 7, line 55 – column 8, line 10) *using the TCL configuration commands* (column 6, lines 53 – 56) *and assigning functionality to the new graphical objects* (column 9, lines 39 – 42).

**As per claim 16**, and taking into account the rejection of claim 14, Nahaboo further discloses:

- *loading a new top level TCL command into the namespace which corresponds to one or more new TCL configuration commands* (column 3, lines 52 – 54, column 6, lines 50 – 56, and column 9, lines 53 – 60)
- *building graphical objects* (column 7, line 55 – column 8, line 10 and column 10, lines 36 – 44) *according to new TCL configuration commands* (column 6, lines 53 – 56)
- *assigning functionality to the built graphical objects* (column 9, lines 39 – 42 and column 10, lines 36 – 44) *according to the new TCL configuration commands* (column 6, lines 53 – 56)

- *displaying the user-interactive window containing the graphical objects according to the new TCL configuration commands* (column 3, lines 34 – 36), wherein the disclosed example is not intended to limit the invention in any way, and is only an example of one of many different types of GUI's that may be created from objects built through configuration commands as made possible through Nahaboo's disclosed invention for developing a user interface

The examiner has interpreted the fact that the interface is able to load the file of commands to reconstruct the interface in a purely dynamic manner sufficiently corresponds to being able to change a look and feel according to new commands and objects.

**As per claim 20**, and taking into account the rejection of claim 19, Nahaboo further discloses *changing the graphical user interface based on changing configuration commands from the user* (column 6, lines 62 – 63) *and displaying a changed graphical user interface during operation based on the changing configuration commands* (column 6, lines 56 – 59).

**As per claim 21**, and taking into account the rejection of claim 19, Dangelo further discloses *interfacing with a suite of integrated circuit design tools for producing an integrated circuit layout and associated netlist* (column 2, line 55 – column 3, line 13), wherein it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teachings of Dangelo into the invention of Nahaboo for the same reasons as disclosed in the rejection of claim 1, *supra*. Furthermore, since the user has control over defining some aspects of an interface, it would be obvious that the user also has the ability to completely define all aspects of an interface for circuit design.

**As per claim 22**, and taking into account the rejection of claim 21, Nahaboo further discloses *loading a design tool from the suite of design tools into the graphical user interface based on a user command* (column 8, lines 7 – 51).

**As per claim 23**, and taking into account the rejection of claim 22, Nahaboo further discloses that *the one or more user configuration commands are assigned to one or more graphical objects* (column 9, lines 39 – 42).

**As per claim 25**, and taking into account the rejection of claim 24, Dangelo further discloses that *the command processor interprets the user input to generate at least one graphical object within the graphical user interface associated with at least one design tool of the one or more design tools* (column 3, lines 34 – 61; column 8, lines 47 – 67; and column 9, line 54 – column 10, line 10), wherein column 3, lines 46 – 61 discloses that the description supports a structural description of graphical components that corresponds to a behavioral description of program statements, further wherein it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teachings of Dangelo into the invention of Nahaboo for the same reasons as disclosed in the rejection of claim 1, *supra*.

**As per claim 26**, and taking into account the rejection of claim 25, Dangelo further discloses that *the graphical object is selectable by the user to load the at least one design tool into the graphical user interface, the graphical user interface accessible by the user to produce an integrated circuit design* (column 14, lines 22 – 39 and 51 – 59), wherein it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teachings of Dangelo into the invention of Nahaboo for the same reasons as disclosed in the rejection of claim 1, *supra*.

**As per claim 27**, and taking into account the rejection of claim 5, Dangelo further discloses that *at least one of the graphical objects is associated with at least one integrated design tool of the suite of integrated circuit design tools* (column 13, lines 54 – 61), wherein it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teachings of Dangelo into the invention of Nahaboo for the same reasons as disclosed in the rejection of claim 1, *supra*.

**As per claim 28**, and taking into account the rejection of claim 27, Dangelo further discloses that *the at least one integrated design tool is executable by the command interpreter to design and test an integrated circuit layout, and wherein the at least one of the graphical objects is selectable by the user to access the at least one integrated design tool* (column 14, lines 22 – 39 and 51 – 59), wherein it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the teachings of Dangelo into the invention of Nahaboo for the same reasons as disclosed in the rejection of claim 1, *supra*.

#### ***Response to Arguments***

6. Applicant's arguments filed on 3/27/2008 have been fully considered but they are not persuasive.
7. The Applicant has argued that, in Nahaboo, the loaded "saved interface" does not modify a graphical user interface by "building" objects or "assigning functionality to the built objects," as recited in claim 1.



In response to this argument, the Examiner respectfully disagrees. Please refer to the rejection of claim 1 *supra* and also to column 7, line 55 – column 8, line 10; column 9, lines 39 – 42; and column 10, lines 36 – 44, wherein the creation of objects has been interpreted as sufficiently corresponding to building objects, and further wherein the commands pertaining to said creation, which assign functionality, may be interpreted configuration commands, such as those entered by a user.

8. The Applicant has argued that the configuration of the application in Nahaboo is not modified at run time during execution of the tool, but rather is implemented at run time by loading the fixed and predefined file.

In response to this argument, the Examiner respectfully disagrees. Please refer to the rejection of claim 1 *supra* and to column 6, lines 62 – 64 and column 7, line 55 – column 8, line 10, wherein the editor serves to modify at run time, because a user edited the objects directly through the interface.

9. The Applicant has argued that the user interface of Nahaboo is produced from the saved file, and are not built as recited in claim 1.

In response to this argument, the Examiner respectfully disagrees. Although the user interface of Nahaboo may be saved and loaded from a saved file, it is also built as recited in claim 1. Please refer to the rejection of claim 1 *supra* and to column 6, lines 62 – 64 and column 7, line 55 – column 8, line 10, wherein the editor serves to build the interface, because a user

edits the objects directly through the interface, wherein said interface may be saved as well, in order to reproduce the interface by loading the saved file.

10. The Applicant has argued that fails to disclose or suggest "wherein the graphical objects are selectable by a user to access the assigned functionality to produce an integrated circuit design," as recited in claim 1.

The Examiner respectfully disagreed. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In addition, please refer to the new rejection of claim 1, *supra*, wherein it is disclosed that the obvious modification of Nahaboo and Dangelo would serve to produce an integrated circuit design. In addition, Nahaboo's invention is for an extremely flexible interface development tool that can be used *regardless* of the application, and thus is able to be used to produce an integrated circuit design if the user so wishes (column 1, lines 29 – 31).

11. The Applicant has argued that Nahaboo does not disclose or suggest "upon execution of a command processor, loading a top level Tool Command Language (TCL) command into a namespace, the command processor including a graphical user interface (GUI) without graphical objects," as recited in claim 8.

In response to this argument, the Examiner respectfully disagrees. Please refer to the new rejection of claim 8 *supra*, which discloses these newly amended features. In addition, the disclosed sections of Nahaboo et al. pertaining to claim 8, sufficiently teach building and assigning functionality to objects, wherein the use of an object toolbox, such as the disclosed X/MOTIF graphical object toolbox, has been interpreted as sufficiently corresponding to the use of a Tool Command Language, wherein both are languages that may be interchangeably used for creating, modifying, and displaying an interface, and in either case will achieve the same desired result. Furthermore, Fig. 4B depicts "including a graphical user interface (GUI) without graphical objects."

12. The Applicant has argued that Nahaboo does not disclose or suggest "building graphical objects within the graphical interface according to the interpreted configuration commands," as recited in claim 8 and that Nahaboo et al. also do not provide for configuration commands to be loaded by the user through a command line during execution.

The Examiner respectfully disagrees. please refer to column 10, line 45 – column 11, line 2; column 15, lines 20 – 21; and Fig. 5, wherein an example of displaying a user-interactive window containing the graphical objects according to the interpreted configuration commands is disclosed, further wherein the disclosed example is not intended to limit the invention in any way, and is only an example of one of many different types of GUI's that may be created from objects built through configuration commands as made possible through Nahaboo's disclosed invention for developing a user interface. Furthermore, Fig. 4B allows for configuration commands to be loaded by the user through a command line during execution.

13. The Applicant has argued that Nahaboo fails to disclose or suggest that the graphical objects are selectable by a user to produce an integrated circuit design, as recited in claim 8.

The Examiner respectfully disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In addition, please refer to the new rejection of claim 8, *supra*, wherein it is disclosed that the obvious modification of Nahaboo and Dangelo would serve to produce an integrated circuit design. In addition, Nahaboo's invention is for an extremely flexible interface development tool that can be used *regardless* of the application, and thus is able to be used to produce an integrated circuit design if the user so wishes (column 1, lines 29 – 31).

14. The Applicant has argued that Nahaboo fails to disclose or suggest "assembling a graphical user interface having no hard coded objects and including at least one graphical user interface (GUI) component based on interpreted configuration commands from the user, the at least one graphical user interface (GUI) component selectable by a user to access an associated function to generate an integrated circuit design," as recited in claim 19.

The Examiner respectfully disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413,

208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In addition, please refer to the new rejection of claim 19, *supra*, wherein it is disclosed that the obvious modification of Nahaboo and Dangelo would serve to produce an integrated circuit design. In addition, Nahaboo's invention is for an extremely flexible interface development tool that can be used *regardless* of the application, and thus is able to be used to produce an integrated circuit design if the user so wishes (column 1, lines 29 – 31).

15. The Applicant has argued that Dangelo fails to mention "building graphical objects within the graphical interface according to the interpreted configuration commands" and "displaying the graphical objects within the graphical interface according to the interpreted configuration commands," "wherein the graphical objects are selectable by a user to access the assigned functionality to produce an integrated circuit design," as recited in claim 1.

The Examiner respectfully disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

16. The Applicant has argued that Dangelo does not disclose or suggest "upon execution of a command processor, loading a top level Tool Command Language (TCL) command into a

namespace, the command processor including a graphical user interface (GUI) without graphical objects," as recited in claim 8.

The Examiner respectfully disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

17. The Applicant has argued that Nahaboo and Dangelo, alone or in combination, do not disclose or suggest "a command processor having a graphical user interface and a command interpreter for interpreting user commands, the graphical user interface specified entirely by a user via a user input including one or more configuration commands provided to the command processor at run time of the command processor and interpreted by the command interpreter, wherein the configuration commands build graphical objects within the graphical user interface and assign functionality to the built graphical objects," as recited in claim 24.

The Examiner respectfully disagrees. Please refer to the new rejection of newly amended claim 24, *supra*, which discloses these features.

18. The Applicant has argued that none of the cited references, alone or in combination, disclose or suggest all of the elements of claims 25, 26, 27, or 28.

The Examiner respectfully disagrees. Please refer to the rejections of newly added claims 24 – 28, *supra*, which disclose these elements.

*Conclusion*

19. It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

20. *The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The cited documents represent the general state of the art.*

*Newly cited art of particular note includes, but is not limited to:*

- *Voll et al. (US 5,551,028)*
- *Jones et al. (US 5,526,517)*
- *Billups, III (US 6,173,246 B1)*
- *Keong et al. (US 6,177,942 B1)*
- *Southgate et al. (US 6,110,223)*
- *Dove et al. (US 5,999,861)*
- *Mantooth et al. (US 5,963,724)*
- *Rostoker et al. (US 5,867,399)*
- *Hassoun (US 5,838,949)*
- *Cheng et al. (US 5,706,453)*

21. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric A. Wiener whose telephone number is 571-270-1401. The examiner can normally be reached on Monday through Thursday from 9am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo, can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR



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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Eric A Wiener/  
Examiner, Art Unit 2179

/Ba Huynh/  
Primary Examiner, Art Unit 2179